Insert after Page 17 the following Abstract:

ABSTRACT

An optical displacement sensor includes a source of optical radiation, a two-dimensional array of radiation detectors, and at least one modulating element disposed between the source and detector. The modulating element has alternating first and second modulating regions circumferentially spaced around a central axis thereof. The modulating element is displaceable relative to the array of detectors so that the detector array forms a two-dimensional image of the first and second regions of the modulating element of the array. A data processor is connected to the detector array and is adapted to identify the orientation of at least two different radially extending edges of regions on the modulating element from the two-dimensional image and also to determine the position of the centre of the element from the determined orientation of the edges.